# Atropine – Nerve Agent & Organophosphate Poisoning

**Approved:** EMS Medical Directors Consortium  
**Effective:** August 1, 2022

<table>
<thead>
<tr>
<th>DRUG NAME - GENERIC</th>
<th>Atropine: Nerve Agent and Organophosphate Poisoning</th>
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<tbody>
<tr>
<td>DRUG NAME - TRADE</td>
<td>Atropine, AtroPen, component of Mark 1 Kits and DuoDote</td>
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<tr>
<td>DRUG CLASSIFICATION</td>
<td>Anticholinergic, antidote for organophosphate and nerve agent poisoning</td>
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## Dosage Forms
- Chempak atropine: 0.4mg/ml (20 mg vial)  
- Duodote: 2 mg atropine  
- Mark 1 Kit: 2 mg atropine

## Action(s)
- Competitively inhibits action of acetylcholine at muscarinic receptor sites. Receptors affected include salivary, bronchial, sweat glands, eyes, heart and GI tract (most-to-least sensitive)  
- Increases SA and AV node conduction  
- Dries secretions

## Indications
For the management of toxicity caused by organophosphate insecticides and nerve agents poisoning (e.g. tabun, sarin, soman) including muscle fasiculations, nausea and vomiting, copious secretions, bradycardia, weakness, shortness of breath, unconsciousness, convulsions, paralysis and apnea

## Contraindications
Known or documented hypersensitivity in non-ACLS/nerve agent/organophosphate scenarios

## Adult Dose / Route
- Nerve Agent/Organophosphate Poisoning: 2 mg IM and titrate until desired effect (drying of tracheobronchial secretions, improvement of breathing and bradycardia)  
- No max dose.

## Pediatric Dose / Route
- Pediatric nerve agent/organophosphate exposure dosages are not included in the Drug Appendi  
- See Protocol: HAZ MAT / NERVE AGENTS - PEDIATRIC - ALS

## Side Effects
Decreased secretions/dry mouth, intense facial flushing and hot skin temperature, blurred vision or pupil dilation, photophobia, tachycardia, restlessness